

Appendix Contents

Appendix C:	Revenues and Expenditures
	Financial Projections
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LRP FINANCIAL PROJECTIONS - Finish CHF Projects in FY 2007

5 cent fuel tax increase->

Ref	Description	2001	2002	2003	2004	2005	2006
ANNUAL FUNDING TOTALS							
	Available State Funds			54,488,860	55,392,055	113,255,716	118,628,765
	Federal Prgm (non-CHF, excludes MPO and JHC Funds)			121,137,238	123,713,238	123,713,238	126,949,103
	CHF Totals (net)			130,114,000	-130,079,000	87,000	206,000
	Total All funding sources			305,740,097	49,026,293	237,055,954	245,783,868
CUMULATIVE FUNDING TOTALS							
	Available State Funds			54,488,860	109,880,915	223,136,631	341,765,397
	Federal Prgm (non-CHF)			121,137,238	244,850,476	368,563,713	495,512,816
	CHF Totals (net)			130,114,000	35,000	122,000	328,000
	Total All funding sources			305,740,097	354,766,390	591,822,344	837,606,212
PRESERVATION OF STATE SYSTEM							
	Contractual Maintenance			50,000,000	50,000,000	55,000,000	55,000,000
	Signals, Spot Impr, Lighting, Barrier			10,900,000	11,400,000	11,800,000	12,154,000
	Bridge Preventive Maintenance			10,000,000	11,000,000	12,000,000	12,360,000
	Bridge Rehabilitation / Replacement			4,700,000	4,841,000	9,100,000	9,373,000
	Highway Rehabilitation / Replacement			28,100,000	28,943,000	39,811,290	41,005,629
	Hazard Elimination, Safety, Enhancements			7,500,000	7,725,000	7,956,750	8,195,453
	Region / Department Contingencies			3,500,000	3,500,000	3,900,000	3,900,000
	Annual System Preservation			114,700,000	117,409,000	139,568,040	141,988,081
	CUMULATIVE TOTAL			114,700,000	232,109,000	371,677,040	513,665,121
Annual Differential of Funding less System Preservation				191,040,097	-68,382,707	97,487,914	103,795,787
Cumulative Differential of Funding less System Preservation				191,040,097	122,657,390	220,145,304	323,941,091

					"1st Decade"		
2007		2008	2009	2010	2008-2010	2011	2012
124,180,046		131,894,589	137,882,493	144,073,933	413,851,014	214,130,956	222,708,718
130,428,885		171,696,278	175,130,204	178,632,808	525,459,290	182,205,464	185,849,573
-289,000		39,000	25,000	-42,000	22,000	39,000	-49,000
254,319,930		303,629,867	313,037,697	322,664,741	939,332,304	396,375,420	408,509,291
465,945,442		597,840,031	735,722,524	879,796,457		1,093,927,413	1,316,636,130
625,941,700		797,637,979	972,768,182	1,151,400,990		1,333,606,454	1,519,456,028
39,000		78,000	103,000	61,000		100,000	51,000
1,091,926,142		1,395,556,009	1,708,593,706	2,031,258,447		2,427,633,867	2,836,143,158
55,000,000		55,000,000	55,000,000	55,000,000	165,000,000	60,000,000	60,000,000
12,518,620		12,894,179	13,281,004	13,679,434	39,854,617	14,589,817	15,027,512
12,730,800		13,112,724	13,506,106	13,911,289	40,530,119	18,328,628	18,878,486
9,654,190		9,943,816	10,242,130	10,549,394	30,735,340	10,865,876	11,191,852
42,235,798		43,502,871	44,807,958	46,152,196	134,463,025	57,536,762	59,262,865
8,441,316		8,694,556	8,955,392	9,224,054	26,874,002	9,500,776	9,785,799
3,900,000		3,900,000	3,900,000	3,900,000	11,700,000	4,300,000	4,300,000
144,480,724		147,048,145	149,692,590	152,416,367		175,121,858	178,446,514
658,145,845		805,193,990	954,886,580	1,107,302,947		1,282,424,806	1,460,871,320
109,839,207		156,581,721	163,345,107	170,248,373	490,175,202	221,253,562	230,062,777
433,780,298		590,362,019	753,707,126	923,955,500		1,145,209,061	1,375,271,838

								2nd Decade
2013	2014	2015	2016	2017	2018	2019	2020	2011-2020
233,596,611	240,786,540	250,290,778	260,131,984	346,422,694	458,478,349	474,715,557	491,485,714	3,192,747,901
189,566,565	193,357,896	197,225,054	201,169,555	205,192,946	209,296,805	213,482,741	217,752,396	1,995,098,996
-28,322,000	28,345,000	-7,000	9,000	-46,000	19,147,000	21,500,000	21,700,000	62,316,000
394,841,176	462,489,436	447,508,832	461,310,539	551,569,640	686,922,154	709,698,299	730,938,110	5,250,162,897
1,550,232,742	1,791,019,281	2,041,310,059	2,301,442,043	2,647,864,737	3,106,343,086	3,581,058,643	4,072,544,358	
1,709,022,593	1,902,380,489	2,099,605,543	2,300,775,098	2,505,968,044	2,715,264,849	2,928,747,590	3,146,499,986	
-28,271,000	74,000	67,000	76,000	30,000	19,177,000	40,677,000	62,377,000	
3,230,984,334	3,693,473,770	4,140,982,602	4,602,293,141	5,153,862,781	5,840,784,935	6,550,483,234	7,281,421,344	
60,000,000	60,000,000	60,000,000	60,000,000	65,000,000	65,000,000	65,000,000	65,000,000	620,000,000
15,478,337	15,942,687	16,420,968	16,913,597	17,921,005	18,458,635	19,012,394	19,582,766	169,347,716
19,444,841	20,028,186	20,629,032	21,247,903	25,885,340	26,661,900	27,461,757	28,285,610	226,851,682
11,527,608	11,873,436	12,229,639	12,596,528	12,974,424	13,363,657	13,764,566	14,177,503	124,565,090
61,040,751	62,871,974	64,758,133	66,700,877	78,701,903	81,062,960	83,494,849	85,999,694	701,430,768
10,079,373	10,381,754	10,693,207	11,014,003	11,344,423	11,684,756	12,035,298	12,396,357	108,915,745
4,300,000	4,300,000	4,300,000	4,300,000	4,700,000	4,700,000	4,700,000	4,700,000	44,600,000
181,870,910	185,398,037	189,030,978	192,772,907	216,527,095	220,931,907	225,468,865	230,141,931	1,995,711,001
1,642,742,229	1,828,140,266	2,017,171,244	2,209,944,152	2,426,471,246	2,647,403,154	2,872,872,018	3,103,013,949	
212,970,267	277,091,399	258,477,854	268,537,632	335,042,545	465,990,247	484,229,434	500,796,180	3,254,451,896
1,588,242,105	1,865,333,504	2,123,811,357	2,392,348,989	2,727,391,535	3,193,381,781	3,677,611,215	4,178,407,395	

2021	2022	2023	2024	2025	2026	2027	2028
508,805,725	526,693,019	636,195,776	658,025,520	680,560,758	703,823,668	727,837,112	752,624,660
222,107,444	226,549,593	231,080,585	235,702,196	240,416,240	245,224,565	250,129,056	255,131,638
21,900,000	22,100,000	22,300,000	22,500,000	22,700,000	22,900,000	23,100,000	23,300,000
752,813,169	775,342,612	889,576,361	916,227,716	943,676,999	971,948,233	1,001,066,169	1,031,056,297
4,581,350,082	5,108,043,102	5,744,238,878	6,402,264,398	7,082,825,156	7,786,648,824	8,514,485,937	9,267,110,596
3,368,607,430	3,595,157,023	3,826,237,608	4,061,939,804	4,302,356,045	4,547,580,610	4,797,709,666	5,052,841,304
84,277,000	106,377,000	128,677,000	151,177,000	173,877,000	196,777,000	219,877,000	243,177,000
8,034,234,513	8,809,577,125	9,699,153,486	10,615,381,202	11,559,058,201	12,531,006,434	13,532,072,603	14,563,128,900
65,000,000	65,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000
20,170,249	20,775,356	21,398,617	22,040,575	22,701,792	23,382,846	24,084,332	24,806,862
29,134,178	30,008,203	30,908,449	31,835,703	32,790,774	33,774,497	34,787,732	35,831,364
14,602,829	15,040,913	15,492,141	15,956,905	16,435,612	16,928,681	17,436,541	17,959,637
88,579,685	91,237,076	103,974,188	107,093,414	110,306,216	113,615,403	117,023,865	120,534,581
12,768,248	13,151,295	13,545,834	13,952,209	14,370,776	14,801,899	15,245,956	15,703,334
4,700,000	4,700,000	5,100,000	5,100,000	5,100,000	5,100,000	5,100,000	5,100,000
234,955,188	239,912,844	260,419,229	265,978,806	271,705,171	277,603,326	283,678,425	289,935,778
3,337,969,137	3,577,881,981	3,838,301,211	4,104,280,017	4,375,985,188	4,653,588,513	4,937,266,939	5,227,202,717
517,857,980	535,429,768	629,157,131	650,248,910	671,971,828	694,344,908	717,387,743	741,120,519
4,696,265,375	5,231,695,143	5,860,852,275	6,511,101,185	7,183,073,013	7,877,417,921	8,594,805,664	9,335,926,183

		3rd Decade	
2029	2030	2021-2030	Comments / Assumptions
			Shaded columns indicate a 5cent gas tax increase
887,050,973	916,748,078	6,998,365,290	3% Annual Growth, refer to funding worksheet and fuel tax page for details
260,234,270	265,438,956	2,432,014,544	2% Annual Growth, refer to MPO 5year, funding worksheet and fuel tax page.
23,500,000	23,700,000	228,000,000	Per UDOT Comptroller/GOPB
1,170,785,243	1,205,887,034	9,658,379,833	
10,154,161,569	11,070,909,647		
5,313,075,574	5,578,514,530		
266,677,000	290,377,000		
15,733,914,143	16,939,801,177		
75,000,000	75,000,000	700,000,000	Increases by \$5 million every 6 years.
25,551,067	26,317,599	231,229,295	Increases by 3% per year with the exception of outlined items.
36,906,305	38,013,494	333,990,701	Increases by 3% per year with the exception of outlined items.
18,498,426	19,053,379	167,405,065	Increases by 3% per year with the exception of outlined items.
124,150,618	127,875,137	1,104,390,182	Increases by 3% per year with the exception of outlined items.
16,174,435	16,659,668	146,373,654	Increases by 3% per year with the exception of outlined items.
5,500,000	5,500,000	51,000,000	Increases by \$400,000 every 6 years.
301,780,852	308,419,277	2,734,388,897	Figures outlined in a box indicate a specific amount
5,528,983,568	5,837,402,845		was added to the growth rate formula in conjunction
			with the tax rate increase. Refer to each cell for details.
869,004,391	897,467,757	6,923,990,937	
10,204,930,575	11,102,398,332		

The cost projections for the reconstruction of the roads are based on 2002 average construction costs, rounded up to a more even number. The measurements for each road are based on assumptions stated on the cost calculation sheets. The chart below shows the costs and percentages that were obtained from individuals outside of the UDOT Planning Section. These costs and percentages, plus others for miscellaneous construction items, were used to calculate the multiplier for each of the cost calculations. Attached are the costs calculations for various scenarios.

LINE ITEM	RESPONSIBLE	CONTACT PERSON	ESTIMATE URBAN	ESTIMATE RURAL
ITS	Paul Vidmar	Sharon Briggs	5% of construction	3% of construction
Bike/Ped	Lee Theobald	Jim Price	5% of construction	5% of construction
Signals	Paul Vidmar	Rich Clarke	\$150,000.00	\$150,000.00
Right-of-Way	Paul Vidmar	LaMar Maybe	50% of construction	20% of construction
Access Relocate	Lee Theobald	Brent Schvaneveldt and Craig Hancock	2% of construction	1 % of construction
Bridges	Glen Ames	Dave Eixenberger	\$100/sq ft replace, \$50/sq ft rehab	\$100/sq ft replace, \$50/sq ft rehab
Box Culverts	Glen Ames	Hugh Boyle	\$20,000/mile	\$20,000/mile
Safety	Mike Kaz.	Bob Hull	\$117,000/project	\$117,000/project
Utilities	Lee Theobald	Brent Schvaneveldt and Craig Hancock	7% of construction	3% of construction

The project costs were calculated based what was needed for that maintenance section. The costs were also based on rural or urban areas and concrete or asphalt pavement. The elements of the formula are as follows:

RECONSTRUCTION –

$$\frac{(\text{Average Number of Lane}) + (\text{Shoulder Widths} + \text{Median Width})}{12} \times (\text{Length of Project Section}) \times (\text{Recon. Cost per Lane Mile})$$

MITIGATE CONGESTION – $2 \times (\text{Length of Project Section}) \times (\text{Recon. Cost per lane mile})$

REHABILITATION –

$$\frac{(\text{Average Number of Lane}) + (\text{Shoulder Widths} + \text{Median Width})}{12} \times (\text{Length of Project Section}) \times (\text{Rehab. Cost per Lane Mile})$$

SAFETY – Cost of \$117,000 per project (Traffic and Safety Department has spent \$21.5 million on 184 spot safety improvement projects since 1995)

BRIDGE – (Cost of \$511,000 per bridge) \times (Number of bridges per project section)
Based on average square foot per bridge \times weighted cost for bridge replacements and rehabilitations

These costs will be refined and recalculated with future iterations.

*Median Widths up to 16 feet only

**Length of Project Section is in Miles

Financial Table

Money Pot	Total '08-'10	Per Region	Total '11-'20	Per Region	Total '21-'30	Per Region	Total per Region
Bridge R/R	\$30,735,340.00	\$ 7,683,835.00	\$124,565,090.00	\$ 31,141,272.50	\$167,405,065.00	\$ 41,851,266.25	\$80,676,373.75
Highway R/R	\$42,222,485.09	\$ 10,555,621.27	\$334,297,339.64	\$ 83,574,334.91	\$610,993,554.22	\$ 152,748,388.55	\$246,878,344.74
Safety	\$26,874,002.00	\$ 6,718,500.50	\$108,915,745.00	\$ 27,228,936.25	\$146,373,654.00	\$ 36,593,413.50	\$70,540,850.25
Differencial (Cong.)	\$93,133,288.38	\$ 23,283,322.10	\$618,345,860.24	\$ 154,586,465.06	\$1,315,558,278.03	\$ 328,889,569.51	\$506,759,356.66
Total	\$192,965,115.47	\$ 48,241,278.87	\$1,186,124,034.88	\$ 296,531,008.72	\$2,240,330,551.25	\$ 560,082,637.81	\$904,854,925.40
Purple Book	\$ 92,240,540		\$ 367,133,428		\$ 493,396,628		
Orange Book	\$ 165,000,000		\$ 620,000,000		\$ 700,000,000		

	Total '08-'10	Per Region	Total '11-'20	Per Region	Total '21-'30	Per Region	Total 2008-2030
Differencial (Cong.)	\$ 490,175,202.00		\$ 3,254,451,896.00		\$ 6,923,990,937.00		\$ 10,668,618,035
Differencial User							
WFRC - R1	\$ 80,878,908.33		\$ 536,984,562.84		\$ 1,142,458,504.61		\$ 1,760,321,976
WFRC - R2	\$ 188,717,452.77		\$ 1,252,963,979.96		\$ 2,665,736,510.75		\$ 4,107,417,943
MAG	\$ 88,231,536.36		\$ 585,801,341.28		\$ 1,246,318,368.66		\$ 1,920,351,246
Dixie	\$ 19,607,008.08		\$ 130,178,075.84		\$ 276,959,637.48		\$ 426,744,721
Cache	\$ 19,607,008.08		\$ 130,178,075.84		\$ 276,959,637.48		\$ 426,744,721
UDOT	\$ 93,133,288.38	\$ 23,283,322.10	\$ 618,345,860.24	\$ 154,586,465.06	\$ 1,315,558,278.03	\$ 328,889,569.51	\$ 2,027,037,427
Total	\$ 490,175,202.00		\$ 3,254,451,896.00		\$ 6,923,990,937.00		\$ 10,668,618,035